

45670 to 45691—Continued.

involucres are deeply cleft and shorter than the very finely pubescent nutlets. There is a large variation in the involucres and in the pubescence of the leaves, petioles, and branches. (Adapted from *Sargent, Plantae Wilsonianae*, vol. 2, p. 455.)

45674. × MALUS ARNOLDIANA Rehder. Malaceæ.

(Roots.) A plant which is evidently a hybrid of *Malus floribunda* appeared spontaneously in the Arboretum several years ago and has been named *M. arnoldiana*. This plant promises to remain a smaller tree than *M. floribunda*, but its long, spreading, and arching branches are very graceful and the flowers produced on long stems are more than twice as large as those of its parent. The flowers of this interesting tree are considered by some persons more beautiful than those of any other crab apple. (Adapted from *Arnold Arboretum Bulletins of Popular Information*, Nos. 3 and 22.)

45675. MALUS BACCATA MANDSHURICA (Maxim.) C. Schneid. Malaceæ.**Crab apple.**

(Roots.) *Malus baccata mandshurica* is the earliest of the crab apples to open its flower buds in the Arboretum. A native of Manchuria, Chosen (Korea), and northern Japan, it is the eastern form of the better known *Malus baccata*, the Siberian crab apple, which reached Europe more than a century ago and for a long time was one of only two Asiatic crab apples known in western gardens. The Manchurian form as it grows in the Arboretum is a tree 12 to 15 feet tall and broad; the flowers, which are produced in profusion, are pure white, rather more than an inch across, and more fragrant than those of any other Asiatic crab apple. The fruit is round, yellow or red, and not larger than a large pea. This crab apple, which is still rare in this country, for the fragrance of the flowers alone should find a place in all collections. (Adapted from *Bailey, Standard Cyclopedia of Horticulture*, vol. 5, p. 2871.)

45676. MALUS FUSCA (Raf.) C. Schneid. Malaceæ.**Apple.**

(Roots.) A shrub or small tree, sometimes 30 to 40 feet tall, with ovate-lanceolate sharply serrate leaves. The white flowers, an inch in diameter, are borne on slender pubescent pedicels, and appear when the leaves are nearly or quite full grown. The fruit is oblong, three-fourths of an inch or less long, and yellowish or greenish in color. According to Sargent, this tree "grows usually in deep, rich soil in the neighborhood of streams, often forming almost impenetrable thickets of considerable extent, and attains its greatest size in the valleys of Washington and Oregon." The range extends from northern California to Alaska. (Adapted from *Bailey, Standard Cyclopedia of Horticulture*, vol. 5, p. 2875.)

45677. × MALUS MAGDEBURGENSIS Zimmerm. Malaceæ.**Apple.**

(Roots.) *Malus magdeburgensis* is considered to be a hybrid between *M. spectabilis* and *M. dasycphylla*, which was found among a collection of trees planted in the city gardens of Magdeburg and supposed to have been originally imported from Japan. (Adapted from *Möller, Deutsche Gärtner-Zeitung*, vol. 20, p. 254.)